



About the Forest

Congaree National Park preserves the largest and finest stand of old-growth bottomland-hardwood forest remaining in North America. The park protects a forest of champion-sized trees approximately 10 miles long and 3 miles wide along the Congaree River. Periodic flood waters from the river sweep through the park's floodplain forest in winter and spring, carrying the nutrients and sediments that nourish and rejuvenate this irreplaceable ecosystem. The nutrient rich soils support one of the tallest deciduous forests on Earth. In addition to harboring trees of extraordinary size, a wide variety of plant communities provide habitat for an amazing diversity of wildlife. In recognition of its distinct ecosystem, Congaree National Park was designated as an International Biosphere Reserve in 1983.

A hike through the towering trees of Congaree National Park conjures up images of a tropical rainforest. In fact, scientists have made comparisons to tropical rainforests. According to ecologist Dr. Robert Jones, "No area in eastern North America has a greater concentration of super tall trees....with mean heights of dominants varying from 130 to 160 feet." The park's forest includes two national champion trees and 23 state champion trees. The national champion loblolly pine tree located in the park measures 167' tall and 15' in circumference!

Congaree National Park also provides critical breeding and resting habitat for migratory birds, and in 1998 was designated as a Globally Important Bird Area by the American Bird Conservancy. More than 170 species of birds have been observed in the park, including 34 species of warblers and eight types of woodpeckers. The "extinct" ivory-billed woodpecker and Bachman's warbler are prime examples of species that have depended on old-growth areas like the now-rare Congaree bottomland forest. This remnant forest offers a glimpse into the past, when old-growth floodplain forests reached from the Chesapeake Bay into Texas, encompassing more than 63 million acres!

Through the addition of the Old-Growth Bottomland Forest Research and Education Center, the park is better equipped to encourage and support research in this rare ecosystem and to communicate scientific findings with the community. Discover what current projects are underway at this and other learning centers by visiting the internet site, www.nature.nps.gov/learningcenters/index.html

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Old-Growth Bottomland Forest Research and Education Center

Congaree National Park





The idea of *Research Learning Centers* was developed as part of the Natural Resource Challenge, a National Park Service initiative to enhance research activities and promote the sharing of information about park resources to park visitors and the community. Research Learning Centers function as scientific laboratories and research libraries that enhance learning opportunities within our national parks.

The Old Growth Bottomland Forest Research and Education Center is located within Congaree National Park in South Carolina. The Center is strategically located in the middle of the state, near the large, demographically diverse capital city of Columbia. It is within easy driving distance to numerous schools, colleges, and universities.



The Center includes indoor and outdoor classrooms, a natural history research collection, laboratory space, administrative offices, and living quarters for visiting scientists.

The facility focuses on supporting activities in three primary areas:

- Research in Environmental Change
- Research Education (natural and historical)
- GIS Technology

The Congaree old-growth floodplain forest environment is rare. It includes a representative ecosystem that once covered more than 63 million acres along river floodplains in the southeastern United States. The Center facilitates scientific studies in the largest intact tract of old-growth bottomland forest remaining in North America. Scientists work in a “living laboratory” that includes nearly 12,000 acres of unmanipulated floodplain forest which provides a baseline of comparison to human-altered ecosystems. The role of the Center as a site for research and education is consistent with Congaree National Park’s role as an International Biosphere Reserve, a designation bestowed in 1983.



Scientific investigations supported by the Center include the examination of surface and ground water flow and movement throughout the floodplain, water quality assess-

ment, long term studies of forest dynamics, biological inventories, rare plant assessments, verification of historical plant communities through soil core analyses of pollen, neotropical migratory bird behavior and population trends, feral hog monitoring, and non-native species research. Further research and dissemination of scientific findings is key to the wise management and ultimate sustainability of these forested ecosystems.

The existing staff of the Center includes an Education Coordinator and a GIS (geographic information system) Technician. The Education Coordinator develops academic links between the educational community and scientific research projects, and facilitates ways of involving learners of all ages in research activities. The Center’s GIS Technician, in cooperation with the University of South Carolina, handles mapping and geographic informational needs for research being conducted in the park.

For more information about the Old-Growth Bottomland Forest Research and Education Center, contact Superintendent Martha Bogle, (803) 776-4396.



(Inside a Bald Cypress)